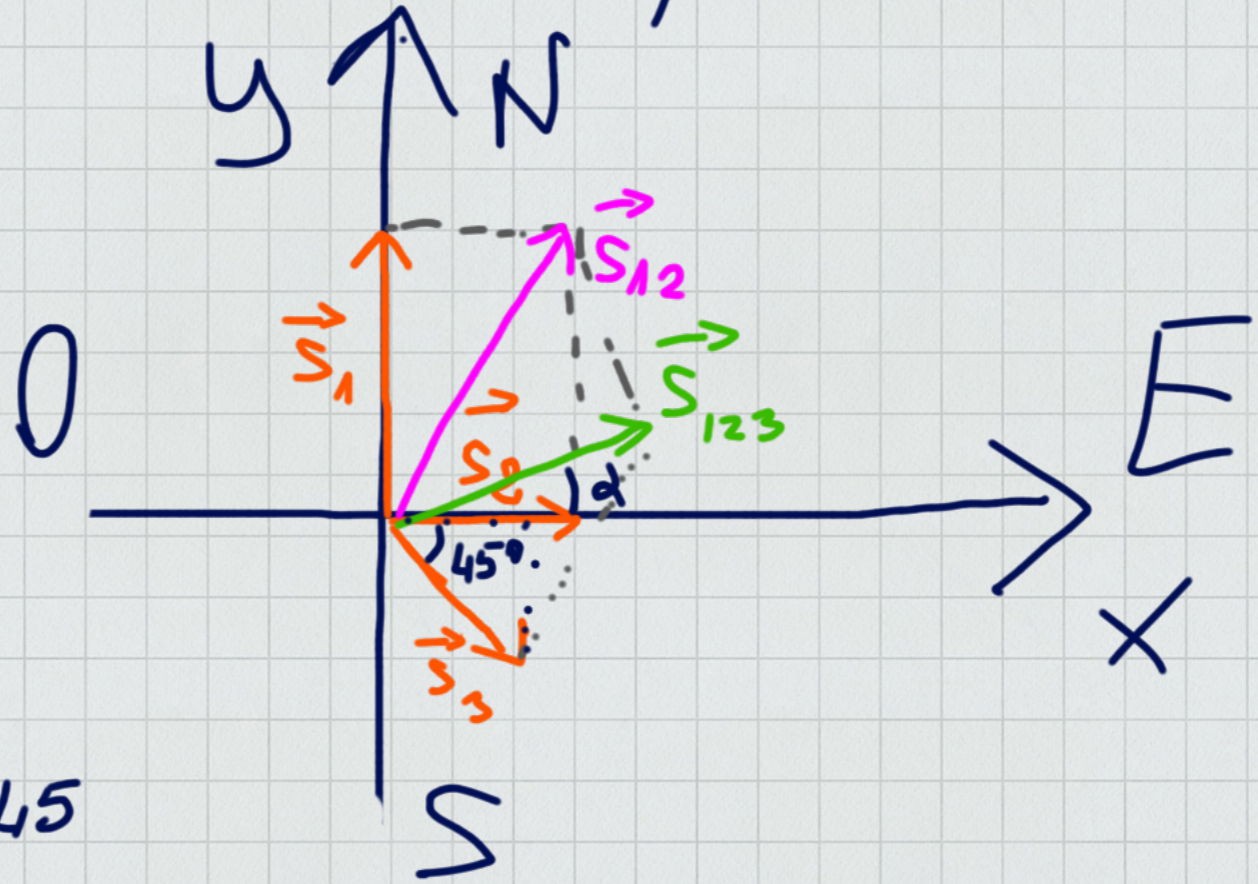


# PROBLEMA SUI VETTORI

$\vec{S}_1$  NORD  $S_1 = 5U$ ;  $\vec{S}_2$  EST  $S_2 = 3U$ ;  $\vec{S}_3$  SUD-EST  $S_3 = 2U$



$$S_{1x} = 0 \quad S_{1y} = 5U$$

$$S_{2x} = 3U \quad S_{2y} = 0$$

$$S_{3x} = S_3 \cos 45 \quad S_{3y} = S_3 \sin 45$$

$$\downarrow \quad \downarrow \\ = 3 \times 0,71 = 2,12U \quad = 2,12U$$

$$S_{Tx} = S_{1x} + S_{2x} + S_{3x} = 5,12U \quad S_{Ty} = 7,12U$$

$$\vec{S}_T = (5,12U; 7,12U) \quad S_T = \sqrt{5,12^2 + 7,12^2} = 8,8U$$

$$S_{Tx} = S_T \cos \alpha \quad \cos \alpha = \frac{S_{Tx}}{S_T} \quad \cos \alpha = \frac{5,12}{8,8} \quad \alpha = \cos^{-1}\left(\frac{5,12}{8,8}\right) = 35^\circ$$